

Listing of Claims:

1-2. (Cancelled)

3. (Currently Amended) A telecommunications system for delivering a Short Message Service (SMS) message within a network capable of providing both voice services on a voice carrier and data services on a data only carrier, said telecommunications system comprising:

a mobile station (MS) supporting both voice services and data services, said MS being currently involved in a data session on said data only carrier; and

a node in wireless communication with said MS for receiving said SMS message, encapsulating said SMS message into an Internet Protocol (IP) packet and routing said SMS message to said MS as an electronic mail message over said data only carrier without disrupting said data session wherein said node further operates to check whether said MS is involved in said data session prior to encapsulating said SMS message into said IP packet, said node transmitting said SMS message to said MS when said MS is not involved in said data session; and

The telecommunications system of Claim 2, wherein said MS transmits to said node a feature code indicating that said MS is in data mode when said data session begins, said node encapsulating said SMS message into said IP packet only when said node has received said feature code.

4. (Original) The telecommunications system of Claim 3, wherein said node is a Mobile Services Switching Center.

5-6. (Cancel)

7. (Original) The telecommunications system of Claim 3, wherein said node is a Base Station Controller.

8-10. (Cancelled)

11. (Currently Amended) A telecommunications system for delivering a Short Message Service (SMS) message within a network capable of providing both voice services on a voice carrier and data services on a data only carrier, said telecommunications system comprising:

a mobile station (MS) supporting both voice services and data services, said MS being currently involved in a data session on said data only carrier;

a node in wireless communication with said MS for receiving said SMS message, encapsulating said SMS message into an Internet Protocol (IP) packet and routing said SMS message to said MS as an electronic mail message over said data only carrier without disrupting said data session; and

a Short Message Service Center for routing said SMS message to said node;

The telecommunications system of Claim 10, wherein said node tags said electronic mail message with a received indicator, said received indicator generating a response message to said node when said MS opens said electronic mail message, said node transmitting a delivery notification message to said Short Message Service Center upon receipt of said response message.

12. (Cancelled)

13. (Currently Amended) A telecommunications system for delivering a Short Message Service (SMS) message within a network capable of providing both voice services on a voice carrier and data services on a data only carrier, said telecommunications system comprising:

a mobile station (MS) supporting both voice services and data services, said MS being currently involved in a data session on said data only carrier;

a node in wireless communication with said MS for receiving said SMS message, encapsulating said SMS message into an Internet Protocol (IP) packet and routing said SMS message to said MS as an electronic mail message over said data only carrier without disrupting said data session and wherein said electronic mail message is routed

to said MS using an electronic mail address for said MS, and The telecommunications system of Claim 12, wherein said electronic mail address includes an International Mobile Subscriber Identity number of said MS at an Internet Service Provider of said MS.

14. (Currently Amended) The telecommunications system of Claim 3 Claim 1, wherein said network is a Code Division Multiple Access 2000 network.

15. (Cancelled)

16. (Currently Amended) A Mobile Services Switching Center for delivering a Short Message Service (SMS) message to a mobile station (MS) supporting both voice services and data services, said Mobile Services Switching Center comprising:

means for determining whether said MS is currently involved in a data session on a data only carrier; and

conversion logic for encapsulating said SMS message into an Internet Protocol (IP) packet and routing said SMS message to said MS over said data only carrier as an electronic mail message when said MS is involved in said data session

The Mobile Services Switching Center of Claim 15, wherein said means for determining comprises a feature code indicating that said MS is involved in said data session, said feature code being sent by said MS at the start of said data session.

17. (Original) The Mobile Services Switching Center of Claim 16, wherein said feature code is stored in a Visitor Location Register associated with said Mobile Services Switching Center.

18. (Cancelled)

19. (Currently Amended) A Mobile Services Switching Center for delivering a Short Message Service (SMS) message to a mobile station (MS) supporting both voice services and data services, said Mobile Services Switching Center comprising:
means for determining whether said MS is currently involved in a data session on a data only carrier;
conversion logic for encapsulating said SMS message into an Internet Protocol (IP) packet and routing said SMS message to said MS over said data only carrier as an electronic mail message when said MS is involved in said data session; and
means for receiving said SMS message from a Short Message Service Center
~~The Mobile Services Switching Center of Claim 18,~~—wherein said conversion logic tags said electronic mail message with a received indicator, said received indicator generating a response message to said Mobile Services Switching Center when said MS opens said electronic mail message.

20. (Original) The Mobile Services Switching Center of Claim 19, further comprising:

means for transmitting a delivery notification message to said Short Message Service Center upon receipt of said response message.

21. (Cancelled)

22. (Currently Amended) A Mobile Services Switching Center for delivering a Short Message Service (SMS) message to a mobile station (MS) supporting both voice services and data services, said Mobile Services Switching Center comprising:
means for determining whether said MS is currently involved in a data session on a data only carrier; and
conversion logic for encapsulating said SMS message into an Internet Protocol (IP) packet and routing said SMS message to said MS over said data only carrier as an electronic mail message when said MS is involved in said data session wherein said conversion logic routes said electronic mail message to said MS using an electronic

mail address for said MS and The Mobile Services Switching Center of Claim 21,
wherein said electronic mail address includes an International Mobile Subscriber Identity number of said MS at an Internet Service Provider of said MS.

23. (Cancelled)

24. (Currently Amended) A Base Station Controller for delivering a Short Message Service (SMS) message to a mobile station (MS) supporting both voice services and data services, said Base Station Controller comprising:

means for determining whether said MS is currently involved in a data session on a data only carrier; and

conversion logic for encapsulating said SMS message into an Internet Protocol (IP) packet and routing said SMS message to said MS over said data only carrier as an electronic mail message when said MS is involved in said data session. The Base Station Controller of Claim 23, wherein said means for determining comprises a feature code indicating that said MS is involved in said data session, said feature code being sent by said MS at the start of said data session.

25-26. (Cancelled)

27. (Currently Amended) A Base Station Controller for delivering a Short Message Service (SMS) message to a mobile station (MS) supporting both voice services and data services, said Base Station Controller comprising:

means for determining whether said MS is currently involved in a data session on a data only carrier;

conversion logic for encapsulating said SMS message into an Internet Protocol (IP) packet and routing said SMS message to said MS over said data only carrier as an electronic mail message when said MS is involved in said data session; and

means for receiving said SMS message from a Short Message Service Center. The Base Station Controller of Claim 26, wherein said conversion logic tags said

electronic mail message with a received indicator, said received indicator generating a response message to said Base Station Controller when said MS opens said electronic mail message.

28. (Original) The Base Station Controller of Claim 27, further comprising:
means for transmitting a delivery notification message to said Short Message Service Center upon receipt of said response message.

29. (Cancelled)

30. (Currently Amended) A Base Station Controller for delivering a Short Message Service (SMS) message to a mobile station (MS) supporting both voice services and data services, said Base Station Controller comprising:

means for determining whether said MS is currently involved in a data session on a data only carrier; and
conversion logic for encapsulating said SMS message into an Internet Protocol (IP) packet and routing said SMS message to said MS over said data only carrier as an electronic mail message when said MS is involved in said data session wherein said conversion logic routes said electronic mail message to said MS using an electronic mail address for said MS and The Base Station Controller of Claim 29, wherein said electronic mail address includes an International Mobile Subscriber Identity number of said MS at an Internet Service Provider of said MS.

31. (Cancelled)

32. (Currently Amended) A method for delivering a Short Message Service (SMS) message within a network capable of providing both voice services on a voice carrier and data services on a data only carrier, said method comprising:

receiving at a node in wireless communication with a mobile station (MS) supporting both voice services and data services said SMS message;

determining whether said MS is currently involved in a data session on said data only carrier The method of Claim 31, wherein said step of determining further comprises: transmitting a feature code indicating that said MS is in data mode when said data session begins from said MS to said node;:

if not involved in a data session, routing said SMS message to said MS via said voice carrier; or,

if so:

encapsulating said SMS message into an Internet Protocol (IP) packet;
and

routing said SMS message to said MS as an electronic mail message
without disrupting said data session.

33. (Original) The method of Claim 32, wherein said node is a Mobile Services Switching Center and further comprising:

storing said feature code within a Visitor Location Register associated with said Mobile Services Switching Center.

34-35. (Cancelled)

36. (Currently Amended) A method for delivering a Short Message Service (SMS) message within a network capable of providing both voice services on a voice carrier and data services on a data only carrier, said method comprising:

receiving at a node in wireless communication with a mobile station (MS) supporting both voice services and data services said SMS message;

determining whether said MS is currently involved in a data session on said data only carrier;

if not, routing said SMS message to said MS via said voice carrier; or

if so:

encapsulating said SMS message into an Internet Protocol (IP) packet;
and

routing said SMS message to said MS as an electronic mail message without disrupting said data session

The method of Claim 34, wherein said node is a Base Station Controller, and wherein said step of routing further comprises:

determining, by said Base Station Controller, routing information associated with said MS for said data session; and

delivering said electronic mail message from said Base Station Controller to said MS using said routing information.

37. (Cancelled)

38. (Currently Amended) A method for delivering a Short Message Service (SMS) message within a network capable of providing both voice services on a voice carrier and data services on a data only carrier, said method comprising:

receiving at a node in wireless communication with a mobile station (MS) supporting both voice services and data services said SMS message wherein said step of receiving further comprises receiving said SMS message from a Short Message Service Center;

determining whether said MS is currently involved in a data session on said data only carrier;

if not, routing said SMS message to said MS via said voice carrier; or

if so:

encapsulating said SMS message into an Internet Protocol (IP) packet;

routing said SMS message to said MS as an electronic mail message without disrupting said data session; The method of Claim 37, further comprising:

tagging said electronic mail message with a received indicator;

generating, by said received indicator, a response message to said node when said MS opens said electronic mail message; and

transmitting a delivery notification message from said node to said Short Message Service Center upon receipt of said response message.

39. (Currently Amended) The method of Claim 36 Claim 34, wherein said step of routing further comprises:
routing said electronic mail message to said MS using an electronic mail address for said MS.